

Plant and Equipment Expenditures, the Four Quarters of 1981

NEW plant and equipment expenditures planned by U.S. nonfarm business for 1981 total \$320.5 billion, 8.4 percent more than in 1980, according to the BEA survey conducted in late April and May (table 1 and chart 5).¹ Spending in 1980 was \$295.6 billion, 9.3 percent more than in 1979.

The planned spending increase for 1981 reported in the latest survey is 1.8 percentage points lower than that reported in March. The downward revision is in both manufacturing and nonmanufacturing industries. In manufacturing, the largest percentage downward revisions are in the machinery, fabricated metals, aircraft, stone-clay-glass, textiles, and rubber industries. In nonmanufacturing, the largest percentage downward revisions are in the air and "other" transportation industries. Sizable upward revisions occurred in several manufacturing industries—nonferrous metals, food-beverage, and petroleum; in nonmanufacturing, upward revisions occurred in mining and gas utilities.

Respondents to the quarterly survey are not asked to report information on price changes reflected in actual or planned spending. Therefore, it is possible to make only rough estimates of real spending plans using price series from another source. An implicit price deflator, a chain price index, and a fixed-weighted price index are prepared for the fixed nonresidential investment component of the national income and product accounts. These measures, which differ as to the weights used, have shown

somewhat different movements in recent quarters (see table 8.1 and the accompanying note in the "National Income and Product Tables"). Smaller increases in the implicit price deflator than in the price indexes in most of the recent quarters suggest that the mix of expenditures for plant and equipment has been shifting toward goods the prices of which have increased at relatively low rates since the base year (1972).

If the latest spending plans reported by business reflect continued shifts to relatively lower priced items and price increases similar to those registered in the second half of 1980, then the survey results imply an increase in real spending of about 1 percent for 1981. If, however, the plans incorporate no further shifts in the mix of expenditures and/or larger price increases, then the plans could imply no increase or a decline in real spending. In 1980, real spending increased 0.2 percent.

Capital spending in the first quarter of 1981 increased 4.2 percent to a seasonally adjusted annual rate of \$312.2 billion, following a 1.1-percent increase in the fourth quarter of 1980. The first-quarter increase was in both manufacturing and nonmanufacturing. Second-quarter planned spending is about the same as actual spending in the first, with a decline in manufacturing offsetting an increase in nonmanufacturing. The third-quarter planned increase of 3.5 percent is primarily in manufacturing. In the fourth quarter, the planned increase, 3.2 percent, is in both manufacturing and nonmanufacturing, with a larger increase in the latter.

Actual spending in the first quarter was 0.7 percent higher than planned spending reported in March. Planned spending for the second quarter is 1.7

percent lower than reported in March and planned spending for the second half is 2.4 percent lower.

Spending for new plant increased 7 percent in the first quarter, to an annual rate of \$128.6 billion; spending for new equipment increased 2½ percent, to \$183.7 billion (table 2). Spending for new plant was 41.2 percent of total capital expenditures in the first quarter and spending for new equipment was 58.8 percent.

The investment climate remains very uncertain. Considerable uncertainty still exists as to the specific provisions that will be contained in the investment

Table 1.—Expenditures for New Plant and Equipment by U.S. Nonfarm Business: Percent Change From Preceding Year

	1980 Actual	1981 Planned as reported by business in:	
		Jan.- Feb.	Apr.- May
Total nonfarm business.....	4.3	10.2	8.4
Manufacturing.....	77.4	12.1	10.4
Durable goods.....	14.3	12.8	8.8
Primary metals ¹	14.1	0.8	2.0
Basic furnaces, steel works.....	5.4	-0.6	-2.9
Nonferrous metals.....	20.4	10.2	20.2
Fabricated metals.....	-2.8	4.8	1.3
Electrical machinery.....	21.8	25.7	15.4
Machinery, except electrical.....	10.2	20.0	12.9
Transportation equipment ¹	18.5	3.0	3.8
Motor vehicles.....	8.1	4	0.8
Aircraft.....	32.4	2.8	-1.7
Stone, clay, and glass.....	-2.9	2.1	-0.2
Other durables.....	20.8	26.0	21.4
Non-durable goods.....	19.8	11.4	12.3
Food including beverages.....	11.7	7.1	13.8
Textiles.....	7.8	6.2	-4
Paper.....	22.0	-1.1	-9
Chemicals.....	16.8	4.1	2
Petroleum.....	27.6	21.7	20.8
Rubber.....	-20.2	32.7	8
Other non-durables.....	27.1	5.9	7.5
Nonmanufacturing.....	4.7	8.9	7.1
Mining.....	28.7	17.4	26.2
Transportation.....	-2.1	0.5	4
Railroad.....	8.0	1.4	3.8
Air.....	1	2.5	-0.0
Other.....	-11.3	14.1	7.2
Public utilities.....	4.4	2.0	5.1
Electric.....	1.7	7.6	2.8
Gas and other.....	10.1	0.6	13.7
Trade and services.....	5.2	0.3	4.2
Communication and other.....	0.2	13.4	11.1

¹ Includes industries not shown separately.

1. Plans have been adjusted for biases (table 6, footnote 1). The adjustments were made for each industry. Before adjustment, plans for 1981 were \$132.87 billion for manufacturing and \$135.85 billion for nonmanufacturing. The net effect of the adjustments was to lower manufacturing \$2.08 billion and to raise nonmanufacturing \$6.78 billion.

incentive measures now being considered by Congress. Negative factors in the investment climate include the ex-

tremely high interest rates and the existence of excess capacity in many manufacturing industries: The BEA index of manufacturing capacity utilization in March was well below rates of 2 years ago, as was the proportion of assets owned by manufacturers reporting a need for more capacity. A positive factor is that the rate of inflation in capital goods prices has been moderately lower in recent quarters. Changes in any of these factors could lead to further revisions in 1981 spending plans.

Manufacturing Programs

Manufacturers reported a first-quarter increase in spending of 5 percent, to a seasonally adjusted annual rate of \$124.5 billion. The increase, which was considerably larger in nondurable goods industries than in durables, followed increases of 2 percent in the fourth quarter and one-half of 1 percent in the third. A decline of 2 percent is planned for the second quarter and increases of 7 percent and 2½ percent are planned for the third and fourth quarters. The second-quarter decline and the third-quarter increase are in both durables and nondurables. The fourth-quarter increase is in durables; a small decline is planned in nondurables.

Planned spending for the year 1981, \$127.9 billion, is 10½ percent more than in 1980; the actual spending increase last year was 17½ percent. Nondurables industries plan an increase this year of 12½ percent, and durables industries, 8½ percent. In nondurables, the largest increases are in petroleum, 27 percent, and food-beverage, 14 percent. In durables, the largest increases are in "other durables," 21½ percent; nonferrous metals, 20 percent; electrical machinery, 15½ percent; and nonelectrical machinery, 13 percent.

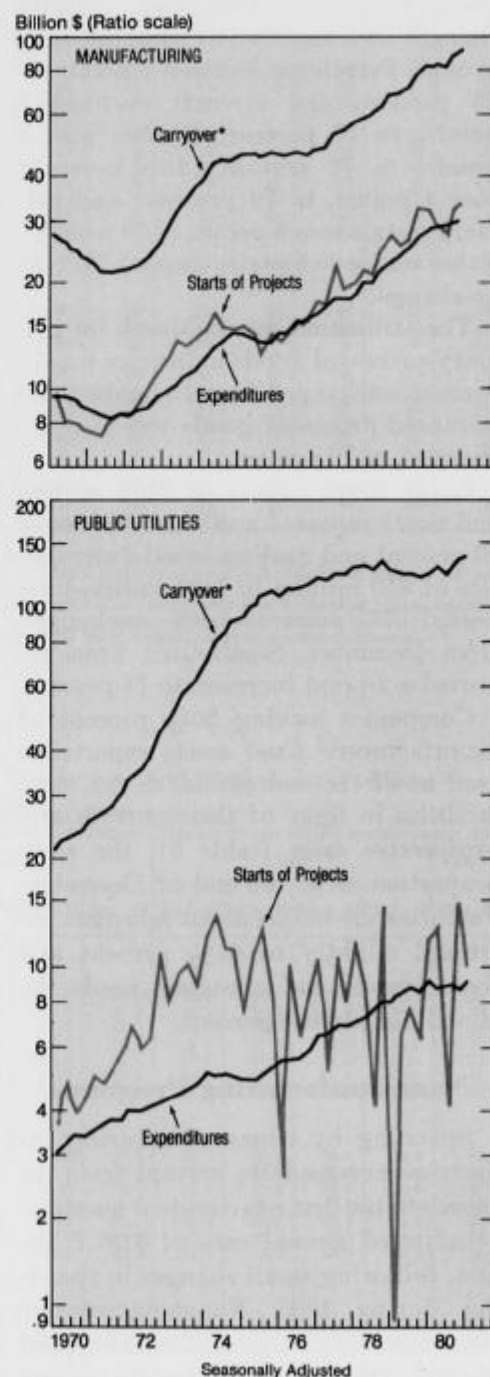
Starts and carryover of projects

New investment projects started by manufacturers during the first quarter totaled \$35.4 billion (seasonally adjusted), 5½ percent higher than in the fourth quarter of 1980 (table 3 and chart 6). Sizable increases in the petroleum and chemical industries were partly offset by declines in the paper and stone-clay-glass industries.

CHART 5
Plant and Equipment Expenditures



CHART 6
Starts and Carryover of Investment Projects



*Carryover as of end of period.

Capacity utilisation

The utilization of manufacturing capacity was 78 percent in March (table 4), unchanged from December. This rate is 2 points above the recession trough in June and September last year and 6 points below the 84 percent recorded in March 1979, before the rate began to slide down.

Although the overall rate was unchanged from December, sizable changes were reported by some industry groups. Petroleum declined 7 points, to 73 percent, and aircraft declined 3 points, to 77 percent. Rubber rose 5 points, to 75 percent; food-beverage rose 4 points, to 79 percent; and primary metals rose 2 points, to 79 percent. Other major industries showed little or no change.

The utilization rate in March for primary-processed goods industries was 78 percent, unchanged from December, and advanced-processed goods was also unchanged, at 78 percent.

Large firms (assets of \$100 million and over) reported a utilization rate of 80 percent and medium-sized firms (assets of \$10 million to \$100 million) reported 78 percent—both unchanged from December. Small-sized firms reported a 2-point increase, to 74 percent.

Companies owning 30½ percent of manufacturers' fixed assets reported a need as of the end of March for more facilities in light of their current and prospective sales (table 5), the same proportion as at the end of December. Facilities viewed as about adequate increased slightly to 61½ percent and those viewed as exceeding needs declined slightly to 8 percent.

Nonmanufacturing Programs

Spending by nonmanufacturing industries increased 3½ percent from the fourth to the first quarter, to a seasonally adjusted annual rate of \$187.7 billion, following small changes in spending during 1980. Nonmanufacturers plan increases of 1 percent in the second quarter, 1½ percent in the third, and 4 percent in the fourth.

For the year 1981, plans are for spending totaling \$192.6 billion, 7 per-

Table 2.—Expenditures for New Plant and for New Equipment by U.S. Nonfarm Business
(Billions of dollars; quarters seasonally adjusted at annual rates)

	1979	1980	1979				1980				1981
			I	II	III	IV	I	II	III	IV	
Total nonfarm business	270.46	285.63	285.66	285.24	273.85	284.35	291.88	294.36	298.13	299.86	312.34
Plant	105.75	117.55	109.16	104.70	106.56	105.55	115.94	116.50	117.60	120.27	129.57
Equipment	164.73	178.08	182.97	181.44	180.50	178.78	175.93	177.86	179.64	179.59	182.77
Manufacturing	98.69	115.81	98.75	94.71	100.11	106.57	111.77	114.09	116.49	118.63	124.50
Plant	30.52	34.05	29.65	29.91	31.90	31.82	33.83	34.35	37.09	38.89	40.03
Equipment	67.96	79.75	69.10	64.77	68.71	74.78	77.94	79.74	79.41	81.74	85.47
Durable goods	51.87	58.91	48.98	49.25	52.18	55.03	58.28	59.38	58.79	58.77	61.24
Plant	14.06	16.28	12.58	13.66	14.12	14.89	16.46	16.99	16.72	16.27	16.50
Equipment	37.07	42.04	36.58	35.59	38.01	40.14	41.78	42.39	41.47	44.60	44.74
Nondurable goods	47.81	56.90	49.77	45.47	47.97	51.55	53.49	54.71	57.71	59.86	63.27
Plant	18.89	19.76	16.77	16.28	17.37	16.93	17.35	18.25	20.87	21.85	22.54
Equipment	30.78	37.12	33.00	29.19	30.70	34.62	36.14	36.46	37.84	37.94	40.73
Nonmanufacturing	171.77	179.81	186.90	190.52	173.04	177.73	180.13	179.66	179.53	180.85	187.74
Plant	74.90	81.49	72.83	74.28	75.18	75.73	82.15	80.15	80.50	83.37	89.54
Equipment	96.87	98.32	114.07	116.27	97.86	102.00	97.98	99.51	99.03	97.48	98.20
Mining	11.26	13.51	11.23	11.01	11.46	11.80	11.89	12.81	13.95	14.28	15.20
Plant	5.75	7.75	6.39	6.30	6.85	6.85	6.89	7.11	8.20	8.01	8.98
Equipment	5.51	5.76	4.84	4.71	4.61	4.95	5.00	5.70	5.75	6.27	6.22
Transportation	12.25	12.00	11.48	12.02	12.07	13.20	12.47	12.40	12.33	11.76	11.74
Plant	2.75	2.99	2.58	2.71	2.81	2.87	3.29	2.93	3.58	2.98	3.12
Equipment	9.50	9.00	8.90	9.31	9.26	10.33	9.18	9.47	8.75	8.75	8.61
Public utilities	20.96	25.44	22.48	24.09	24.05	24.06	26.20	26.06	26.48	26.90	26.06
Plant	21.61	25.00	20.00	21.70	22.80	21.41	23.54	22.56	23.68	23.30	23.01
Equipment	12.35	12.44	11.54	12.39	12.25	12.67	12.66	12.48	12.82	13.60	13.04
Trade and services	79.26	81.78	78.03	76.05	75.86	82.69	82.17	81.07	81.19	82.91	83.43
Plant	32.28	35.28	33.88	31.85	31.72	33.18	30.18	34.20	34.10	36.97	38.03
Equipment	46.97	46.50	44.15	44.20	44.14	49.50	51.99	46.87	47.09	45.94	45.40
Communication and other	34.59	34.95	33.71	34.44	35.05	36.00	37.34	37.40	36.97	36.11	40.32
Plant	12.41	12.82	12.37	12.52	12.18	12.40	12.83	13.20	12.89	11.79	13.79
Equipment	22.18	22.13	21.34	21.92	22.86	23.60	24.51	24.20	24.08	24.32	26.53

1. Includes construction; social service and membership organizations; and forestry, fisheries, and agricultural services.

Table 3.—Starts and Carryover of Plant and Equipment Projects, Manufacturing and Public Utilities

[Billions of dollars]												
	Starts ¹						Carryover ²					
	1979	1980	1980				1981	1980				1981
			I	II	III	IV		I	Mar.	June	Sept.	
Manufacturing.....	112.99	133.33	31.36	29.83	27.16	34.79	34.88	52.60	53.46	51.84	52.35	59.94
Durable goods ³	69.18	87.67	15.91	14.21	13.26	15.76	16.36	35.49	37.98	36.88	35.45	37.64
Primary metals.....	7.73	7.81	2.43	1.90	1.84	2.20	2.87	7.91	7.36	7.23	7.30	7.78
Electrical machinery.....	9.18	10.25	3.43	2.78	2.33	2.82	2.86	4.78	5.35	4.83	4.74	4.95
Machinery, except electrical.....	12.66	10.72	3.08	2.18	2.53	3.03	3.33	5.53	5.15	5.98	5.94	6.87
Transportation equipment.....	19.91	16.50	4.08	4.06	3.83	4.60	4.81	12.82	12.18	11.24	10.97	11.65
Stone, clay, and glass.....	3.70	3.46	1.08	.84	.81	1.02	.84	2.45	2.26	1.89	1.92	2.11
Nondurable goods ³	53.88	65.66	15.45	15.72	14.87	19.02	18.52	43.11	41.78	45.14	42.38	53.30
Food including beverage.....	7.49	7.41	1.95	1.86	1.77	2.25	1.87	4.64	4.85	4.80	4.98	5.83
Paper.....	6.87	7.74	1.97	2.06	1.45	2.25	1.88	3.91	4.90	4.04	4.23	4.15
Chemicals.....	12.53	14.01	4.10	3.41	3.07	2.45	3.83	11.01	11.23	11.08	10.99	12.10
Petroleum.....	19.28	20.03	5.08	5.88	5.81	5.46	9.79	15.86	17.80	18.15	20.05	24.36
Public utilities.....	21.67	41.69	12.98	7.57	1.12	14.14	13.90	139.86	128.88	131.84	128.35	137.38
Seasonally adjusted												
Manufacturing.....			32.43	32.41	27.74	33.53	35.41	52.78	52.69	51.25	53.16	59.44
Durable goods ³			18.78	18.38	13.94	15.08	15.50	39.44	38.59	39.38	38.82	37.12
Primary metals.....			2.96	1.87	1.94	2.09	2.15	7.85	7.27	7.31	7.50	7.78
Electrical machinery.....			2.90	2.70	2.57	3.39	2.34	4.88	5.17	5.24	5.11	5.00
Machinery, except electrical.....			2.87	2.06	2.52	3.12	3.20	5.64	5.02	5.78	5.81	5.80
Transportation equipment.....			4.30	3.33	3.83	4.92	5.02	12.90	11.09	11.14	11.42	11.69
Stone, clay, and glass.....			1.03	.74	.89	1.07	.84	2.43	2.21	1.88	2.03	2.13
Nondurable goods ³			35.73	17.02	13.80	18.94	19.90	42.72	41.88	44.91	45.24	52.22
Food including beverage.....			1.61	1.97	1.83	1.90	2.05	4.90	4.87	4.83	5.00	4.92
Paper.....			1.87	2.06	1.59	2.10	1.30	5.82	6.10	6.06	5.41	5.43
Chemicals.....			4.43	3.28	2.91	3.49	3.60	11.10	11.30	10.77	11.28	11.98
Petroleum.....			5.00	7.44	5.85	7.73	9.71	12.38	15.03	18.32	20.22	23.00
Public utilities.....			12.91	12.96	4.20	14.88	10.10	124.63	128.72	124.63	128.15	131.25

1. Starts are estimated by adding changes in carryover to expenditures during the given period.
2. Carryover refers to expenditures yet to be incurred on plant and equipment projects already underway at the end of the period.
3. Includes industries not shown separately.

Table 4.—Manufacturers' Capacity Utilization Rates: Operating Rates and Ratios of Operating to Preferred Rates¹

(Seasonally adjusted)

Industry and asset size	Operating rates (percent)									Ratios of operating to preferred rates								
	1979				1980				1981	1979				1980				1981
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.
All manufacturing.....	84	83	82	81	80	76	78	78	78	0.80	0.80	0.87	0.95	0.80	0.81	0.81	0.84	0.83
Asset size:																		
\$100.0 million and over.....	87	85	84	83	82	77	77	80	80	.92	.94	.88	.87	.87	.82	.82	.85	.84
\$10.0 to \$99.9 million.....	82	81	81	81	79	77	78	78	78	.88	.87	.87	.86	.85	.83	.84	.84	.84
Under \$10.0 million.....	76	75	75	75	74	70	71	72	74	.88	.83	.82	.82	.80	.77	.78	.79	.80
Durable goods ²	85	84	82	80	80	74	75	78	77	.90	.88	.85	.85	.84	.79	.79	.83	.83
Asset size:																		
\$100.0 million and over.....	88	87	84	81	82	75	76	80	79	.92	.91	.87	.85	.86	.79	.80	.84	.83
\$10.0 to \$99.9 million.....	81	78	78	79	77	73	74	75	75	.88	.85	.85	.85	.85	.79	.80	.81	.81
Under \$10.0 million.....	75	75	75	75	73	70	71	72	72	.81	.82	.82	.82	.79	.77	.78	.78	.77
Primary metals.....	87	87	85	80	83	80	86	77	79	.82	.88	.88	.85	.87	.74	.70	.68	.68
Electrical machinery.....	84	83	83	81	83	79	79	78	78	.83	.80	.80	.80	.80	.85	.85	.85	.85
Machinery, except electrical.....	92	83	81	80	81	80	89	78	81	.87	.87	.84	.84	.84	.81	.81	.84	.84
Transportation equipment ³	87	83	76	74	74	67	71	74	72	.88	.84	.79	.76	.76	.69	.73	.75	.74
Motor vehicles.....	94	89	78	72	70	69	67	70	69	.82	.86	.75	.71	.69	.60	.68	.70	.69
Aircraft.....	74	78	77	77	79	78	78	80	77	.60	.82	.85	.84	.85	.84	.85	.85	.83
Stone, clay, and glass.....	78	82	78	83	75	71	78	74	74	.84	.88	.85	.90	.81	.78	.80	.81	.79
Nondurable goods ²	83	83	83	83	81	78	78	78	79	.88	.89	.88	.88	.87	.84	.84	.85	.85
Asset size:																		
\$100.0 million and over.....	85	85	85	84	83	80	80	80	81	.82	.81	.81	.80	.85	.85	.85	.87	.86
\$10.0 to \$99.9 million.....	82	83	83	84	83	80	81	81	82	.80	.85	.85	.85	.85	.85	.87	.85	.85
Under \$10.0 million.....	78	78	78	78	73	71	71	72	75	.84	.84	.82	.82	.82	.77	.78	.79	.82
Food including beverage.....	79	81	78	79	77	77	76	75	79	.86	.90	.87	.87	.85	.84	.85	.84	.86
Textiles.....	85	83	88	82	82	77	79	80	80	.89	.86	.85	.85	.84	.81	.83	.84	.82
Paper.....	81	91	92	91	88	88	87	88	89	.94	.94	.96	.95	.91	.90	.91	.92	.95
Chemicals.....	89	82	88	83	82	78	78	78	78	.81	.80	.91	.91	.89	.82	.85	.86	.86
Petroleum.....	89	85	86	88	85	83	76	80	78	.82	.82	.90	.88	.88	.86	.81	.85	.77
Rubber.....	87	75	75	70	72	65	72	70	75	.82	.80	.84	.78	.77	.70	.77	.75	.80
Primary-processed goods ⁴	86	84	83	83	81	76	74	78	78	.88	.87	.88	.87	.86	.89	.79	.84	.89
Advanced-processed goods ⁴	84	83	81	80	80	76	77	78	78	.88	.88	.86	.85	.85	.81	.83	.83	.84

1. The survey asks manufacturers to report actual and preferred rates of capacity utilization for the last month of each quarter. Utilization rates for industry and asset-size groups are weighted averages of individual company rates. See "The Utilization of Manufacturing Capacity, 1965-73," *Survey of Current Business*, July 1974, p. 47.

2. Also includes lumber, furniture, fabricated metals, instruments, and miscellaneous.

3. Also includes other transportation equipment.

4. Also includes tobacco, apparel, printing-publishing, and leather.

5. Consists of lumber; stone, clay, and glass; primary metals; fabricated metals; textiles; paper; chemicals (at ½ weight); petroleum; and rubber.

6. Consists of furniture, electrical machinery, machinery except electrical, motor vehicles, aircraft, other transportation equipment, instruments, food including beverage, tobacco, apparel, printing-publishing, chemicals (at ½ weight), leather, and miscellaneous.

cent more than last year. The largest increases are planned by mining, 25 percent; "gas and other" utilities, 14 percent; and "communication and other," 11 percent. Trade and services, railroads, and electric utilities plan increases of less than 5 percent. Air transportation plans a 9-percent decline.

Starts of new projects by public utilities in the first quarter totaled \$10.1 billion, compared with \$14.9 billion in the fourth quarter of 1980. Carryover of utility projects increased \$1.1 billion during the first quarter, to \$131.3 billion at the end of March.

Table 5.—Manufacturers' Evaluation of Their Plant and Equipment Facilities¹

(Percent distribution of gross depreciable assets)

	1979				1980				1981
	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31
More plant and equipment needed:									
All manufacturing.....	85.5	84.8	87.1	87.2	86.5	82.0	82.0	86.6	88.4
Durable goods ²	83.1	84.6	84.8	85.8	82.9	78.1	79.0	86.8	86.2
Primary metals.....	77.3	77.3	79.5	72.5	77.8	79.9	79.0	75.6	75.9
Metal products ³	89.9	89.4	89.7	89.1	89.5	89.4	89.0	89.0	89.0
Nondurable goods ²	87.9	86.4	88.6	88.5	87.9	84.9	84.9	84.3	84.0
Food including beverage.....	80.7	82.1	82.7	82.4	84.7	80.8	81.5	81.0	81.0
Chemicals and petroleum.....	83.9	83.0	83.1	83.0	84.9	81.9	81.9	88.8	80.0
About adequate:									
All manufacturing.....	89.7	85.3	88.1	87.8	88.1	88.7	89.0	86.8	81.6
Durable goods ²	82.6	80.1	87.6	87.0	87.9	87.1	87.8	88.8	81.2
Primary metals.....	77.1	77.3	75.0	71.6	70.1	70.8	73.2	72.6	87.6
Metal products ³	88.5	87.7	88.1	89.2	88.0	88.5	88.5	88.8	87.1
Nondurable goods ²	86.8	88.3	88.7	88.7	88.4	89.1	89.7	89.0	81.9
Food including beverage.....	84.7	85.0	87.0	84.4	87.4	89.0	89.0	89.4	80.7
Chemicals and petroleum.....	81.4	85.7	86.3	86.5	84.1	86.9	86.8	89.5	86.6
Existing plant and equipment exceeds needs:									
All manufacturing.....	4.3	4.2	4.8	5.0	4.4	8.3	8.9	8.4	8.0
Durable goods ²	4.8	5.3	5.9	7.1	9.2	13.8	13.7	13.4	12.6
Primary metals.....	5.7	6.4	5.5	5.9	6.1	19.3	18.8	18.0	17.5
Metal products ³	3.6	4.8	0.2	6.7	7.9	10.1	10.9	9.9	9.0
Nondurable goods ²	5.3	2.3	2.7	2.8	3.7	5.0	4.4	3.7	3.5
Food including beverage.....	5.0	6.9	7.3	8.2	7.9	9.6	7.6	7.6	8.3
Chemicals and petroleum.....	5.6	1.9	.6	.6	1.8	1.2	1.6	.9	1.2

1. According to respondent companies' characterizations of their plant and equipment facilities, taking into account their current and prospective sales for the next 12 months.

2. Includes industries not shown separately.

3. Includes machinery, transportation equipment, and fabricated metals.

Table 6.—Expenditures for New Plant and Equipment by U.S. Nonfarm Business¹

[Billions of dollars]

	1979	1980	1981 ¹	Seasonally unadjusted								Seasonally adjusted at annual rates							
				1980				1981				1980				1981			
				I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Total nonfarm business.....	270.46	295.63	320.61	64.18	74.82	74.12	82.31	69.15	78.40	80.99	91.96	231.59	234.36	226.21	239.59	312.24	311.87	322.88	332.99
Manufacturing.....	98.68	115.81	127.59	24.30	28.86	28.95	33.87	26.30	30.81	32.25	38.33	117.77	124.69	116.46	125.63	124.99	121.99	132.46	132.45
Durable goods.....	51.87	58.91	62.89	12.54	14.79	14.49	17.89	12.34	15.12	15.62	19.78	58.29	62.38	58.19	58.77	61.24	60.28	64.96	65.65
Primary metals ²	6.78	7.71	8.40	1.60	1.91	2.97	2.19	1.60	1.84	2.21	2.65	7.08	7.34	6.92	7.37	7.64	7.06	8.55	8.88
Blast furnaces, steel works.....	2.09	3.20	3.10	.72	.88	.84	.88	.45	.75	.88	1.06	3.74	3.48	3.20	2.60	2.68	3.14	3.28	3.41
Nonferrous metals.....	2.80	3.11	3.74	.64	.72	.86	.09	.74	.87	1.01	1.13	2.02	2.91	3.39	3.18	3.48	3.82	4.01	3.89
Fabricated metals.....	3.65	2.86	2.90	.67	.75	.76	.79	.62	.71	.72	.94	3.14	2.97	3.06	2.72	2.97	2.78	2.93	2.90
Electrical machinery.....	7.28	9.59	11.07	1.38	2.23	2.35	3.20	3.05	2.42	2.77	3.89	8.83	9.30	9.97	10.10	9.79	10.16	11.36	12.00
Machinery, except electrical.....	10.62	11.59	15.06	2.55	2.87	2.76	3.42	2.90	3.19	3.34	3.85	11.56	11.51	11.06	12.35	12.06	12.18	13.50	15.02
Transportation equipment ³	15.32	15.16	18.70	3.39	4.72	4.47	5.07	4.12	4.81	4.64	5.43	18.06	18.50	17.64	18.68	18.99	17.09	18.34	19.08
Motor vehicles.....	8.30	9.06	9.48	2.00	2.40	2.21	2.46	2.28	2.48	2.42	2.86	9.08	9.00	8.88	8.55	10.09	9.28	9.78	9.67
Aircraft.....	5.27	7.08	6.91	1.50	1.78	1.75	2.08	1.48	1.63	1.68	2.19	7.35	7.44	6.70	6.78	6.08	6.76	6.67	7.25
Stone, clay, and glass.....	3.94	3.82	5.47	.80	1.04	.90	1.06	.75	.85	.81	1.03	4.06	3.91	3.74	3.61	3.81	3.26	3.40	3.35
Other durables ⁴	4.22	5.00	5.18	1.09	1.28	1.10	1.48	1.29	1.58	1.64	1.86	4.34	4.46	4.81	5.22	5.73	5.97	6.35	6.41
Non-durable goods.....	47.61	56.90	65.09	11.56	14.06	14.60	16.78	12.84	15.29	15.22	18.63	33.48	46.42	58.21	48.38	63.37	61.71	65.56	64.80
Food including beverage.....	6.82	7.20	8.41	1.52	1.67	1.82	2.00	1.83	2.03	2.11	2.43	7.14	7.81	7.45	7.29	8.55	7.82	8.77	8.83
Textiles.....	1.86	1.62	1.64	.48	.41	.39	.42	.37	.37	.40	.44	1.62	1.60	1.55	1.72	1.53	1.44	1.71	1.77
Paper.....	6.66	6.60	6.75	1.37	1.68	1.71	2.07	1.48	1.87	1.83	2.06	6.82	6.92	6.90	6.93	6.93	6.94	6.70	7.80
Chemicals.....	10.78	12.60	12.82	2.46	3.10	3.22	3.52	2.72	3.21	3.89	3.63	13.00	12.87	13.10	11.87	12.81	12.82	12.57	12.98
Petroleum.....	16.21	20.69	28.22	3.64	4.76	5.45	6.55	6.58	6.17	6.99	7.65	18.08	19.16	21.48	23.36	25.33	25.81	27.48	28.47
Rubber.....	2.17	1.79	1.75	.41	.44	.45	.45	.38	.46	.44	.46	1.84	1.73	1.88	1.87	1.74	1.82	1.76	1.88
Other nondurables ⁴	4.78	6.08	6.58	1.27	1.64	1.45	1.70	1.38	1.58	1.63	1.94	5.82	6.62	5.82	6.13	6.37	6.17	6.56	6.88
Nonmanufacturing.....	171.77	179.81	193.02	41.08	48.16	48.13	48.44	42.85	47.29	48.14	53.74	129.13	129.66	127.88	130.95	167.74	168.88	183.43	199.64
Mining.....	11.38	13.61	16.91	2.74	3.27	3.60	4.01	3.60	4.06	4.40	4.70	11.89	12.81	12.86	15.29	16.20	15.08	17.51	17.87
Transportation.....	12.88	12.00	12.14	2.73	3.81	3.90	3.08	2.89	3.08	2.87	3.68	12.47	12.00	12.28	11.70	11.74	11.48	11.58	12.71
Railroad.....	4.03	4.28	4.30	.98	1.06	1.00	1.20	.95	1.05	1.10	1.28	4.48	4.08	3.88	4.54	4.23	4.10	4.41	4.31
Air.....	4.01	4.01	3.85	1.00	1.27	.99	.91	.89	.94	.71	1.12	3.80	4.27	4.06	3.77	3.85	3.17	3.89	4.55
Other.....	4.84	3.83	4.18	.74	.86	1.07	.94	.74	1.07	1.06	1.22	4.11	3.78	4.15	2.80	3.68	4.21	4.87	4.85
Public utilities.....	33.05	35.44	37.26	3.01	3.84	3.97	3.82	3.95	3.88	3.65	10.30	34.26	35.03	35.68	34.98	36.05	37.30	38.28	37.31
Electric.....	27.65	28.12	29.03	2.64	3.07	3.09	3.09	3.08	2.99	2.92	7.38	28.08	27.91	28.14	27.64	27.68	28.08	28.28	28.73
Gas and other.....	4.81	7.32	8.23	1.37	1.77	3.88	2.10	1.50	2.07	2.28	2.44	7.28	7.12	7.44	7.41	8.36	9.20	7.98	8.57
Trade and services.....	79.24	81.70	85.22	10.08	10.23	10.80	12.09	10.41	11.13	10.92	12.77	82.17	81.07	81.18	82.91	83.48	84.55	84.12	88.33
Wholesale and retail trade.....	32.81	31.78	33.03	4.28	5.54	5.48	6.47	4.78	5.08	5.08	5.88	32.34	32.28	31.48	30.57	30.57	30.57	30.57	30.57
Finance, insurance, and real estate.....	28.63	31.08	33.03	7.81	7.77	7.80	8.89	7.62	7.80	7.80	8.89	31.56	30.82	31.25	32.53	32.53	32.53	32.53	32.53
Personal, business, and prof. services.....	27.08	28.06	29.16	4.40	4.92	7.03	7.64	7.00	7.25	7.04	7.04	28.29	28.97	27.94	29.11	30.08	30.08	30.08	30.08
Communication and other.....	34.59	36.92	42.00	3.52	3.52	3.28	4.67	3.28	10.28	10.30	11.28	37.24	37.55	36.97	38.11	40.32	40.54	40.97	42.48
Communication.....	23.78	26.14	28.14	3.04	3.77	3.50	4.70	3.58	6.58	6.58	6.58	26.81	26.78	26.82	24.99	28.68	28.68	28.68	28.68
Other ⁵	11.05	10.82	13.86	2.48	2.75	3.08	2.94	2.73	3.70	3.72	4.70	10.43	10.88	10.66	11.22	11.64	11.86	12.29	13.80

1. Estimates are based on planned capital expenditures reported by business in late April and May 1981. The planned expenditures for 1981 have been corrected for biases. The adjustment procedures are described in the October 1980 Survey. Before adjustment, plans for 1981 were \$316.71 billion for total business, \$180.87 billion for manufacturing, and \$135.84 billion for nonmanufacturing.

2. Includes industries not shown separately.

3. Consists of lumber, furniture, instruments, and miscellaneous.

4. Consists of apparel, tobacco, leather, and printing-publishing.

5. Consists of construction; social services and membership organizations; and forestry, fisheries, and agricultural services.

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progress, may further lower the deviation between planned and actual spending.

2. Coverage and Statistical Revisions

The PA capital expenditures series now covers all nonfarm business in the United States. Coverage was expanded by including expenditures for previously omitted portions of industries (see Green and Hertzberg, "Revised Estimates," p. 38) and for four industries previously not included—real estate; professional services; social services and membership organizations; and forestry, fisheries, and agricultural services. Coverage revisions for PA capital expenditures increased from less than \$0.1 billion in 1973 to \$0.4 billion in 1979 (table 6).

Most of the additional coverage in PA expenditures is derived from nonsample sources. The only sample incorporated for the first time in this revision is for real estate, hospi-

tals, and educational services. For the remaining industries or portions of industries, only Rural Electrification Administration (REA) electric utility cooperatives have sizable PA capital expenditures; other industries' PA expenditures are insignificant relative to their total plant and equipment expenditures. For REA electric utility cooperatives, it is assumed that PA capital spending as a percentage of capital spending for generating facilities is equal to the corresponding percentage for corporate utilities. The estimates of PA capital spending for these cooperatives increase rapidly from 1977 through 1979, reflecting a rapid increase in the construction of generating facilities. In earlier years, the main activities of these cooperatives were transmission and distribution—activities not involving pollution abatement.

Statistical revisions in PA capital spending resulted in a decrease for 1973 and increases for all other years. These revisions were due to both the statistical revisions in total uni-

verse plant and equipment spending and to retabulation of PA data from the sample reports from the annual survey.

Statistical revisions in total plant and equipment spending increased from \$11.7 billion in 1973 to \$47.1 billion in 1979. These revisions were due to the incorporation of benchmark data for 1967 and 1972 and to retabulation of the quarterly sample reports. Before retabulation, each company's industry- and size-group classification was reviewed and made to reflect major mergers and acquisitions occurring after 1972, responses received too late for inclusion in the previously published estimates were included, and the responses were recited (see Green and Hertzberg, "Revised Estimates," pp. 26-28).

The reports from the annual survey were also retabulated. Before retabulation, the steps listed for the quarterly surveys were followed. Reclassification of companies and reciting of responses had the largest effect

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